

CLAIMS

What is claimed is:

1. An Fe-Ni alloy material for a shadow mask, comprising: in terms of % by weight, 34.0 to 38.0% of Ni, 0.05 to 0.45% of Cu, 0.10 to 0.50% of a combined total for Mn and Cu, no more than 0.10% of Si and 0.0004 to 0.005% of S with the balance being Fe and other unavoidable impurities; wherein a total count of MnS precipitates and Cu-S type precipitates having a diameter of 0.01 to 3 μm located on the surface of a foil strip 0.05 to 0.3 mm thick being at least 2,000 count/ mm^2 .
2. An Fe-Ni alloy material for a shadow mask, comprising: in terms of % by weight, 30.5 to 34.5% of Ni, 35.0 to 38.0% of a combined total of Ni and Co, 0.05 to 0.45% of Cu, 0.10 to 0.50% of a combined total of Mn and Cu, no more than 0.10% of Si and 0.0004 to 0.005% of S with the balance being Fe and other unavoidable impurities; wherein a total count of MnS precipitates and Cu-S type precipitates having a diameter of 0.01 to 3 μm located on the surface of a foil strip 0.05 to 0.3 mm thick being at least 2,000 count/ mm^2 .
3. An Fe-Ni alloy material for a shadow mask according to Claims 1, wherein: containing 0.10 to 1.0% by weight of Nb.
4. An Fe-Ni alloy material for a shadow mask according to Claims 2, wherein: containing 0.10 to 1.0% by weight of Nb.
5. A method for manufacturing Fe-Ni alloy material for a shadow mask according to Claims 1, wherein: a material temperature of 650 to 1000°C during recrystallization annealing.
6. A method for manufacturing Fe-Ni alloy material for a shadow mask according to Claims 2, wherein: a material temperature of 650 to 1000°C during recrystallization annealing.
7. A method for manufacturing Fe-Ni alloy material for a shadow mask according to Claims 3, wherein: a material temperature of 650 to 1000°C during recrystallization annealing.

8. A method for manufacturing Fe-Ni alloy material for a shadow mask according to Claims 4, wherein: a material temperature of 650 to 1000°C during recrystallization annealing.